The width for measurement of the pavement shall be as shown on the typical cross sections, including additional widening where called for, or as otherwise directed in writing by the Engineer. The length will be measured *horizontally* along the center line of each roadway or ramp.

476.81 Basis of Payment.

Standard cement concrete pavement will be paid for at the contract unit price per square meter complete in place subject to price adjustments as set forth below. No additional payment over the contract unit price will be made for any pavement having an average thickness in excess of that shown on the plans. Average thickness shall be calculated as stated in Subsection 476.77. Where the average thickness of pavement is deficient in thickness by more than 5 millimeters, but less than 10 millimeters, payment will be made as follows:

CONCRETE PAVEMENT DEFICIENCY

Deficiency in Thickness, Determined by Cores	Proportional Part of Contract Prices Allowed
5 millimeters or less	100 percent
More than 5 millimeters, but less than 10 millimeters	80 percent
10 millimeters or more, but less than 15 millimeters	70 percent

Where core measurements indicate that the pavement is deficient in thickness by 10 millimeters but less than 20 millimeters the pavement may be accepted without any payment being made to the Contractor, or it may be replaced at the option of the Contractor with pavement of the specified thickness at his/her entire expense. If the deficiency in thickness is 20 millimeters or more, the Contractor shall be required to remove such deficient areas and replace them with cement concrete pavement conforming with all requirements of these Specifications and to the thickness shown on the plans. Such areas when accepted will then be duly included in the square meters for which payment shall be made at the contract unit price. The Contractor shall receive no compensation for materials or labor involved in removing and replacing deficient areas.

When high early strength concrete is specified at the direction of the Engineer, in order to expedite the opening of pavement to traffic, the high early strength will be obtained by means of an increase in the cement factor and a reduction of the water-cement ratio. The extra cement will be paid for at the actual unit cost per kilogram to the Contractor for the extra quantity of cement actually incorporated in the pavement, plus an allowance of 5% of the cost per kilogram, which cost shall include all equipment, labor storage, transportation and work incidental to its inclusion in the concrete and incorporation in the finished pavement.

476.82 Payment Items.

476.	Cement Concrete Pavement	Square Meter

SECTION 485

GRANITE RUBBLE BLOCK PAVEMENT

DESCRIPTION

485.20 General.

This item of work shall consist of furnishing and setting granite rubble block pavement on a sand cushion on a concrete base course in accordance with these specifications and in close conformity with the lines and grades shown on the plans or established by the Engineer.

MATERIALS

485.40 General.

Materials shall meet the requirements specified in the following Subsections of Division III, Materials:

Granite Rubble Block	M2.03.0
20 MPa - 40 mm - 280 kg Cement Concrete Masonry	M4.02.00
Expansion and Contraction Joints	
	Performed Filler M9.14.0
	Hot Poured Joint Sealer M3.05.0
Mortar	M4.02.15
Sand Borrow	M1.04.0, Type b

CONSTRUCTION METHODS

485.60 General.

The sub-base below the concrete base course shall be fine graded and thoroughly compacted after forms are in place. The sub-base shall be placed on compacted fill as required under Section 401.

485.61 Forms.

Forms shall be placed if directed to the full depth of the combined granite rubble block, sand cushion, and concrete base. They shall be of wood, not less than nominal 50 millimeter thickness and dressed on all four sides. Forms shall be securely staked and braced and shall be constructed and set so as to resist the pressure of the concrete without springing out of alignment. They shall be oiled before use.

485.62 Placing Concrete.

Concrete shall be deposited with minimum rehandling and in one layer. Hand spreading and spading shall be done adjacent to forms and joints.

The concrete shall be struck off and float-finished. Protection and cutting shall be done as required in Section 901. Placing of sand cushion and laying of granite rubble blocks shall not be done until at least 24 hours after the final curing period of the concrete base course.

The forms shall remain in place until the granite rubble blocks are laid, in order to confine the sand cushion and mortar.

485.63 Joints in Concrete.

Weakened plane transverse contraction joints shall be constructed in the concrete base course every 10 meters or as shown on the plans. These joints shall consist of surface slats 50 millimeters deep, varying in width from 10 millimeters at top to 5 millimeters at bottom.

Expansion joints shall be formed at all existing expansion joints of existing reinforced concrete surface where this surface is to be used as the base. Joints shall be 15 millimeters in width and shall be filled with preformed joint filler. All joints shall be sealed with joint filler compound.

485.64 Laying Blocks.

Blocks shall be carefully laid on a sand cushion over the concrete foundation as shown on the plans and as directed, and shall be solidly rammed in position. Joints between blocks shall be a maximum of

40 millimeters and a minimum of 25 millimeters in width. Blocks shall be kept perfectly clean and joints between stones shall be clean and open to the full depth of blocks until the joint is filled with mortar.

After a sufficient area of block pavement has been laid the surface shall be tested with a 3 meter straightedge laid parallel with the centerline and any variation exceeding 10 millimeters shall be corrected and brought to proper grade.

Stones disturbed in making replacements or correcting variations shall be settled into place by carefully ramming or tampering to grade by use of a hand tamper applied upon a 50 millimeter plank.

Each section of block surfacing must be acceptable to the Engineer before joints in that section are filled with mortar.

485.65 Filling Joints.

Mortar shall be placed and worked in such a manner as to fill the joint to a depth 15 millimeters below the surface. The top surface of blocks shall be kept clean of mortar stains. Immediately after the mortar joints have set sufficiently the granite block pavement shall be swept clean and any marks on the top surface removed.

COMPENSATION

485.80 Method of Measurement.

Granite Rubble Block Pavement will be measured by the square meter for the work complete in place including the required excavation and materials.

485.81 Basis of Payment.

This work will be paid for at the contract unit price per square meter for Granite Rubble Block Pavement, complete in place.

485.82 Payment Items.

485.	Granite Rubble Block Pavement	Square Meter